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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,632	09/29/2003	Kenichi Saito	36856.1126	4701

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EXAMINER

TALBOT, BRIAN K

ART UNIT PAPER NUMBER

1762

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,632

Applicant(s)

SAITO ET AL.

Examiner

Brian K. Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/29/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-30 remain in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1,8,15 and 24, the removing and rinsing step are confusing. The Examiner questions how the “rinsing” step is performed to “remove the coating”, when the coating has already been removed in the “removing” step. Clarification is requested.

With respect to claims 16 and 17, the claims are confusing. The claims recite further comprising a polishing step to remove the metal layer and the soluble coating. Is not this already performed by the rising step? Is this an additional removing step? Is this an alternative to a rising step? Clarification is requested.

With respect to claims 2-7,9-14,18-23 and 25-30, the claims are rejected as being dependent upon a rejected base claim.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4,5,8,11,12,15,19,24,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui et al. (3,935,334).

Narui et al. (3,935,334) teaches a process for preparing a metallized resin film for condenser element by providing on a dielectric resinous layer a water soluble coating layer having a pattern corresponding to a margin pattern, providing a metal deposition layer on the resinous layer and the water-soluble coating layer and removing the water soluble coating and the metal layer thereon by washing with water (abstract and col. 9, lines 10-35 and Figs. 5A-5C). Narui et al. (3,935,334) teaches applying the water-soluble layer in a pattern by printing processes such as silk screen coating, roll coating, gravure coating, etc. (col. 8, lines 10-20). The

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water-soluble paint layer can comprise maleic anhydride (col. 7, line 63 – col. 8, line 10). The metal is applied by vacuum metallization and can include a wide variety of metals (col. 8, lines 40-55)

Narui et al. (3,935,334) fails to teach the step of removing the water soluble coating layer to form a pattern, using alcohol as the rinsing solution to form the pattern, and that the metal layer applied thereon is performed electrolessly.

With respect to the step of applying the water-soluble coating being formed in a pattern by the claimed two-process step, i.e. coating and rinsing to form pattern, Narui et al. (3,935,334) teaches forming a pattern by a one-step process, i.e. pattern printing. It is the Examiner's position that one skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar success regardless of which process was utilized to form the pattern coating. In addition, Narui et al. (3,935,334) single step process would provide a simpler, quicker and more precise process while avoiding potentially harmful rinsing solutions.

With respect to the claimed soluble coating being soluble in alcohol, Narui et al. (3,935,334) teaches using a water-soluble coating. One skilled in the art would have had a reasonable expectation of achieving similar success regardless of what type of rinsing solution was utilized to remove the coating layer. Narui et al. (3,935,334) water rinsing process would also provide the benefits of using a cheaper alternative to that of alcohol as well as avoiding potential unwanted reaction with the alcohol and the substrate.

With respect to the metal being applied electrolessly, Narui et al. (3,935,334) teaches applying the metal by vacuum process. It is the Examiner's position that one skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar

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results regardless of how the metal was applied as long as it would be removed during the subsequent rinsing step as is done in Narui et al. (3,935,334).

Claim 2,3,9,10,18,23,25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui et al. (3,935,334) in combination with JP 2001-135541.

Features described above concerning Narui et al. (3,935,334) are incorporated here.

Narui et al. (3,935,334) fails to teach forming the pattern coating by applying and removing by dry or wet blasting and a chip-type component.

JP 2001-135541 teaches a chip-type component whereby a magnetic substance is applied as a mask and the substance is removed to form a pattern by a blasting method. JP 2001-135541 teaches molding magnetic powder and resin around a coil to form the chip-type component (abstract).

Therefore one skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar success by utilizing a coating/blasting removing step as evidenced by JP 2001-135541 for the pattern printing step of Narui et al. (3,935,334).

Claims 7,14,21,22 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui et al. (3,935,334) in combination with Hamatani et al. (6,577,218).

Features described above concerning Narui et al. (3,935,334) are incorporated here.

Narui et al. (3,935,334) fails to teach forming a palladium catalyst layer prior to electroless plating and forming electrolytic plating on the electroless plating to form the external electrodes.

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Hamatani et al. (6,577,218) teaches an electronic component and method of manufacture. An internal conductor coil is encased in a molded body of magnetic powder and resin. Palladium is deposited atop the area for which external electrodes are going to be formed. After the palladium layer is applied, electrodes are formed by electroless plating followed by electrolytic plating (abstract and col. 2, line 10 – col. 7, line 50).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Narui et al. (3,935,334) process by forming the metal layer with the aid of a palladium catalyst as well as forming the multi0layered electrodes as evidenced by Hamatani et al. (6,577,218) with the expectation of achieving similar success.

Claims 6,13,16,17,20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui et al. (3,935,334) in combination with Ueno et al. (5,866,196).

Features described above concerning Narui et al. (3,935,334) are incorporated here.

Narui et al. (3,935,334) fails to teach a removing step comprising polishing or ultrasonic rinsing.

Ueno et al. (5,866,196) teaches an electronic component and method of fabrication. The electronic component includes terminal electrodes formed on the ends of a chip-type component. The electrodes are formed with the use of resists masking and the like. The resists are removed by barrel polishing or ultrasonic cleaning (col. 8, line 60 – col. 9, line 10).

Therefore, one skilled in the art at the tie the invention was made would have had a reasonable expectation of achieving similar success by forming the pattern coating with the use

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of a removing step including polishing or ultrasonic cleaning as evidenced by Ueno et al. (5,866,196).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B-K Talbot 5/15/06

Brian K Talbot
Primary Examiner
Art Unit 1762

BKT